

MACROFLORAL STUDIES ON TERTIARY CLIMATIC CHANGES IN THE
CARPATHIAN BASIN AND ITS SURROUNDINGS

by

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Abstract

On the basis of the flora and vegetation, it is clear, that in Bohemia, under subtropical climate, a laurel-leaf, Paletropical flora dominated the Early Oligocene, possibly enduring till the Middle Oligocene. In Hungary, Lower Oligocene is characterized by a drier climate, which is inferred from the Platanus neptuni - Dryophyllum furcinerve xerophytous forests. The aridity tends to become well-marked southerly. In Egerian times a significant change occurred in the northern part of Central Europe. In this time the Arcto-Tertiary elements gained dominance. The deciduous flora infers a cooler climate and seasonal changes. It is shown that in Germany a strong, and in Bohemia a weaker climatic warming occurred during the Eggenburgian, but this change is hitherto undocumented in Hungary. At the Ottnangian/Carpathian boundary the renewed development of the Mastixioidea-flora suggests a warm climate again for the area of the Bohemian Massif. The Badenian is characterized by a deciduous flora, but laurel-leaf elements are also common yet. In northerly areas significant changes do not occur in the Sarmatian, while in the Balkan region the Arcto-Tertiary elements become dominant in these times. In the Romanian floras this event appears slightly earlier (GIVULESCU 1967), thus a gradual southward shift occurs. Here the Arcto-Tertiary elements

appear in Egerian times, but their dominance shows in the Badenian. In Jugoslavia (PANTIC 1967) their appearance may be dated as of Eggenburgian, and their dominance as of Sarmatian.